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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,984	04/06/2004	Tsung-Jung Kuo	LITP0025USA	2983

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EXAMINER
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KAYRISH, MATTHEW

ART UNIT	PAPER NUMBER
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2627

DATE MAILED: 04/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/708,984	<b>Applicant(s)</b> KUO ET AL.	
	<b>Examiner</b> Matthew G. Kayrish	<b>Art Unit</b> 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments with respect to claims 1 and 12 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-22 are rejected under 35 U.S.C. 102(e) as being unpatentable over Ookawa (US Patent Number 5696746), in view of Jalbert (US Patent Number 6230594).
4. Regarding claims 1, 12 and 13, Ookawa et al disclose:

A disk force-ejection and force-loading device for use in an optical disk drive, the optical disk drive comprising an active gear (figure 7, item 123) of a drive motor (figure 7, item 121) for loading and ejecting an optical disk (column 1, lines 35-42) and a housing (figure 1, item 1) comprising a position hole (figure 8, item 6a) nearby the active gear of the drive motor (See figure 7 & 8), the disk force-ejection and force-loading device comprising:

A drive element installed on one end of the disk force-ejection and force-ejection device (See figure 7, item W) for connecting and driving the active gear (See figure 7) of the drive motor (See figure 7) via the position hole (See figure 7);

Wherein the housing is used for covering the drive motor and the active gear  
(column 9, lines 41-58).

Ookawa fails to disclose:

A motivity provider for rotating the drive element; and

A power provider for providing electric power to the motivity provider.

Jalbert et al disclose:

A motivity provider for rotating the drive element (Abstract (power-operated screw driving device)); and

A power provider for providing electric power to the motivity provider (Abstract (power-operated screw driving device)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Ookawa with an electric, motor driven motivity provider, as this will make it easier to manually eject the disc.

5. Regarding claims 2 and 14, Ookawa et al disclose:

The disk force-ejection and force-loading device of claim 1, wherein the drive element is a gear (See figure 7, item 123).

6. Regarding claims 3 and 15, Ookawa fails to disclose:

The disk force-ejection and force-loading device of claim 1, wherein the motivity provider is a motor.

Jalbert et al disclose:

The disk force-ejection and force-loading device of claim 1, wherein the motivity provider is a motor (Abstract (rotary power source)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Ookawa with an electric, motor driven motivity provider, as this will make it easier to manually eject the disc.

7. Regarding claims 4 and 16, Ookawa et al disclose:

The disk force-ejection and force-loading device of claim 1, wherein the position hole is for matching a position element to connect the drive element and the active gear of the drive motor properly (See figure 7).

8. Regarding claims 5 and 17, Ookawa et al disclose:

The disk force-ejection and force-loading device of claim 4, wherein the position element is connected to the motivity provider and positioned between the drive element and the motivity provider (See figure 7).

9. Regarding claims 6 and 18, Ookawa et al disclose:

The disk force-ejection and force-loading device of claim 2, wherein a terminal end of the drive element is connected to a terminal end of the active gear of the drive motor (See figure 7), and the position hole is positioned on the housing nearby the terminal end of the active gear of the drive motor (See figure 7).

10. Regarding claims 7 and 19, Ookawa et al disclose:

The disk force-ejection and force-loading device of claim 2, wherein a side of the drive element engages a side of the active gear of the drive motor, and the direction of the major axis of the drive element is parallel with the direction of the major axis of the active gear of the drive motor (See figure 7, Relocation of parts not changing the

functionality), and the position hole is positioned on the housing nearby the terminal end of the active gear of the drive motor (See figure 7).

11. Regarding claim 9, Ookawa fails to disclose et al disclose:

The disk force-ejection and force-loading device of claim 1, wherein the action modes of the motivity provider comprise a clockwise rotation for driving the drive element to rotate clockwise and a counterclockwise rotation for driving the drive element to rotate counterclockwise.

Jalbert et al disclose:

The disk force-ejection and force-loading device of claim 1, wherein the action modes of the motivity provider comprise a clockwise rotation for driving the drive element to rotate clockwise and a counterclockwise rotation for driving the drive element to rotate counterclockwise (column 6, lines 25-38, (indicates bidirectional movement, therefore must have a switch of some sort)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to give Jalbert's motivity provider to Ookawa in order to perform both load and eject actions.

12. Regarding claims 10 and 21, Ookawa fails to disclose:

The disk force-ejection and force-loading device of claim 1, wherein the disk force-ejection and force-loading device further comprising:

An outer covering for covering the motivity provider and the power provider; and

A control switch for switching action modes of the motivity provider.

Jalbert et al disclose:

The disk force-ejection and force-loading device of claim 1, wherein the disk force-ejection and force-loading device further comprising:

An outer covering for covering the motivity provider and the power provider (figure 2a, items 12 & 16); and

A control switch for switching action modes of the motivity provider (column 6, lines 25-38, (indicates bidirectional movement, therefore must have a switch of some sort)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made provide Ookawa with a force-ejection and force-loading device with these features, since the cover will protect the power provider, and using switches to change the rotation direction of a motivity provider is well known.

13. Regarding claims 11 and 22, Ookawa fails to disclose:

The disk force-ejection and force-loading device of claim 10, wherein the power provider is a battery.

Jalbert et al disclose:

The optical disk drive of claim 21, wherein the power provider is a battery (column 4, lines 57-62, rotary power source implies battery).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to run Ookawa's motor from a battery, as taught by Jalbert, for the purpose of portability.

14. Claims 8 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ookawa, in view of Jalbert, in further view of Official Notice.
15. Regarding claims 8 and 20, Official Notice is taken that it is old and well known to have the motor axis perpendicular to the axis of a drive gear.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the motor either drive the gears from parallel or perpendicular positions since disc drives for computers have different positioning than for CD and DVD players, the accessibility to the gears can change, making it need a different motor positioning.

### *Conclusion*

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew G. Kayrish whose telephone number is 571-272-4220. The examiner can normally be reached on 8am - 5pm M-F.
17. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on 571-272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 2627

18. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Matthew Greco Kayrish

3/31/2006

MK



  
ANGEL CASTRO  
PRIMARY EXAMINER

4/3/2006